**56IT Applications Unit 3, AOS 1, Online Communities**

**Complete the following, from pgs, 18-28:**

**NETWORK HARDWARE AND SOFTWARE**

**Network Operating Systems**

1. **Describe the role of the network operating system.** The role of a network operating system (NOS) is to control the traffic on the network; it also resolves conflict on the network.
2. **What are the typical tasks of network server software?** The tasks of network server software is that it controls access to files, track uses, maintains log of usage and problems.
3. **What is the role of network client software?** A client – server network is one in which one or more computers act as a server, and the other computers on the network request services from the server.
4. **List the 3 providers of network operating systems.** Windows, Apple, Novell

**Web client software**

1. **List the typical client software.** Email, video convincing, chat rooms, web browsers, etc.

**Software for setting up websites**

* 1. **Describe the role of http protocol.** The ‘http protocol’ is the language for web connection.
  2. **What is the role of web server software?** Web server software provides documents, images and other resources using the ‘http protocol’.
  3. **What is the role of a proxy server?** A proxy server is what sits in between the internet and your node, when connect to the internet. When a client’s browser requests a page to be uploaded, the request goes to a proxy server that substitutes its IP address for that of the client.
  4. **What are the advantages of using a proxy server?** The advantages of the proxy server are to store IP addresses, restrict curtain web pages, etc.
  5. **Describe the role of the following software:**

1. **SMTP** Simple mail transfer protocol or SMTP is the use of electronic mail servers to handle the sending and receiving of client email.
2. **POP3** A Post Office Protocol or POP3 is a server which is used to store messages.
3. **FTP** File transfer protocol or FTP software enables the exchange of files between computers on the internet.
4. **Web software applications** Web software applications are programs specifically designed for the use of websites, these include blogging software, forums and wikis.

**Cross-platform web software**

1. **What is meant by a Cross-platform application? List egs.** Cross-platform applications are programs which can be use across a different range of networking operating systems. Examples of these are java, flash
2. **What is adobe flash?** Adobe Flash is a software tool which website developers to combine interactive content with text, 3D-graphics, audio and video

**Network Hardware**

**Describe the characteristics and role of the following network hardware devices:**

* 1. **Network Interface Card:** A network interface card or NIC is what a device needs to be able to connect to a network; they used to be a card which you would insert into your computer/device, but nowadays they a built into your computer/device.
  2. **Wireless Access Point:** A wireless access point is a central communications device which enables devices/computers to connect and transfer files wirelessly on a network.
  3. **Switches:** A switch only send data to wired computers which have requested the data.
  4. **Routers:** Routers direct the traffic on the network, it also what is in between your computer and the outside world, routers only allow authorized user connect to the network.
  5. **Modems:** Modems transfers analogue signal into digital and digital into analogue.

**For each of the following modem types, in a table indicate the following:**

|  |  |
| --- | --- |
| **MODEM** | **DOWNLOAD SPEED** |
| **Dial up modem** | 56 kbps |
| **ADSL** | 8 Mbps |
| **ADSL 2 +** | 20 Mbps |
| **Broadband Cable** | 30 Mbps |

1. **How does a digital modem differ from a dial-up modem?** Dial-up modems transfer analog signals to digital and vice versa. With ADSL this conversion does not need to happen, that is why digital modems differ form dial-up.